

# Maryland Department of Health and Mental Hygiene 201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor - Anthony G. Brown, Lt. Governor - Joshua M. Sharfstein, M.D., Secretary

# August 28, 2014

# Public Health & Emergency Preparedness Bulletin: # 2014:34 Reporting for the week ending 08/23/14 (MMWR Week #34)

## **CURRENT HOMELAND SECURITY THREAT LEVELS**

National: No Active Alerts

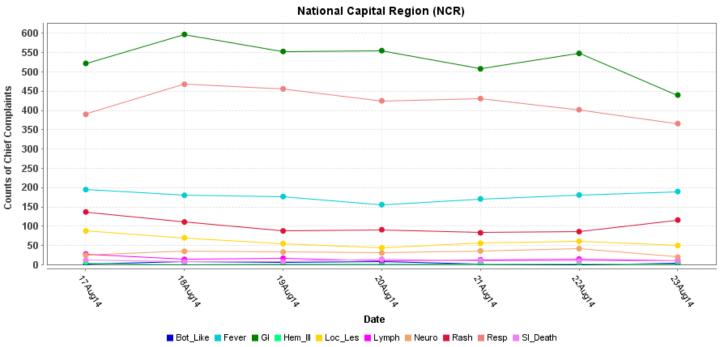
Maryland: Level Four (MEMA status)

# SYNDROMIC SURVEILLANCE REPORTS

## ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

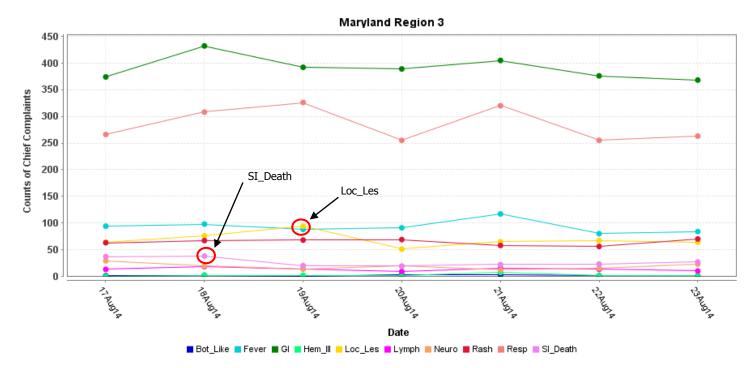
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



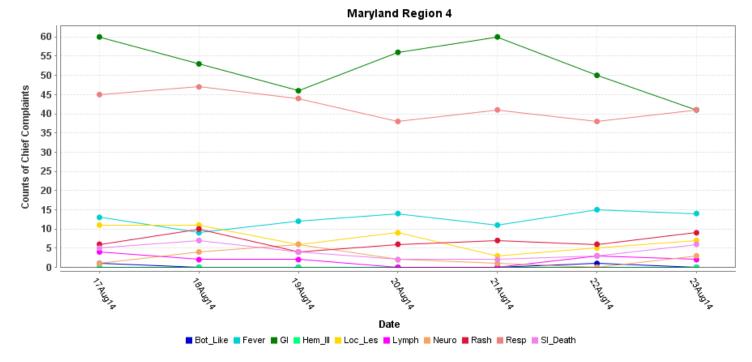
#### **MARYLAND ESSENCE:**

# Maryland Regions 1 and 2 GI 100 $\bigcirc$ 90 80 Counts of Chief Complaints 70 60 50 40 30 20 10 0 + VIBURIA 123 AUGIA ■ Bot\_Like ■ Fever ■ GI ■ Hem\_III ■ Loc\_Les ■ Lymph ■ Neuro ■ Rash ■ Resp ■ SI\_Death

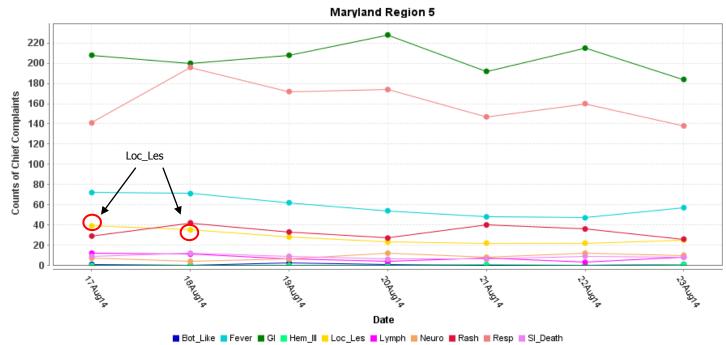


<sup>\*</sup> Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE

<sup>\*</sup> Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



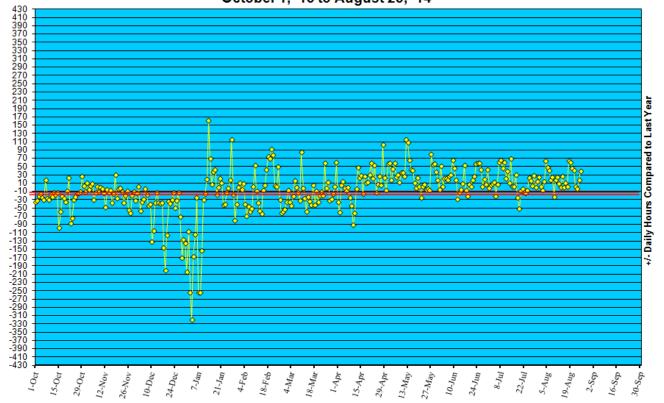
<sup>\*</sup> Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



<sup>\*</sup> Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

#### **REVIEW OF EMERGENCY DEPARTMENT UTILIZATION**

# Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '13 to August 25, '14



YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.

# **REVIEW OF MORTALITY REPORTS**

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

# MARYLAND TOXIDROMIC SURVEILLANCE

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in July 2014 did not identify any cases of possible public health threats.

## **REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

## COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (August 17– August 23, 2014):	14	0
Prior week (August 10 – August 16, 2014):	9	0
Week#34, 2013 (August 18 – August 24, 2013):	7	0

#### 2 outbreaks were reported to DHMH during MMWR week 34 (August 17-23, 2014).

#### 1 Gastroenteritis outbreak

1 outbreak of GASTROENTERITIS in a Hospital

#### 1 Rash illness outbreaks

1 outbreak of HAND, FOOT, AND MOUTH DISEASE associated with a Daycare Center

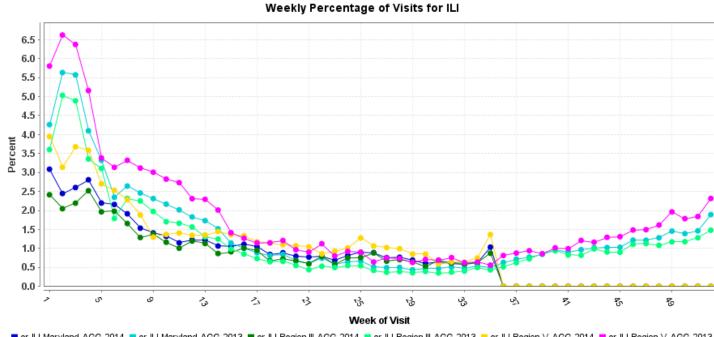
#### **MARYLAND SEASONAL FLU STATUS**

Seasonal Influenza reporting generally occurs October through May. The final reporting period for 2014 was MMWR Week 20.

## SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

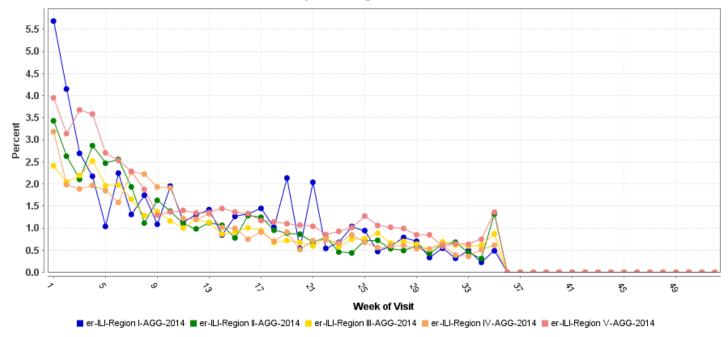
Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



■ er-ILI-Maryland-AGG-2014 ■ er-ILI-Maryland-AGG-2013 ■ er-ILI-Region III-AGG-2014 ■ er-ILI-Region III-AGG-2013 ■ er-ILI-Region V-AGG-2014 ■ er-ILI-Region V-AGG-2013 \*\*

\* Includes 2013 and 2014 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total

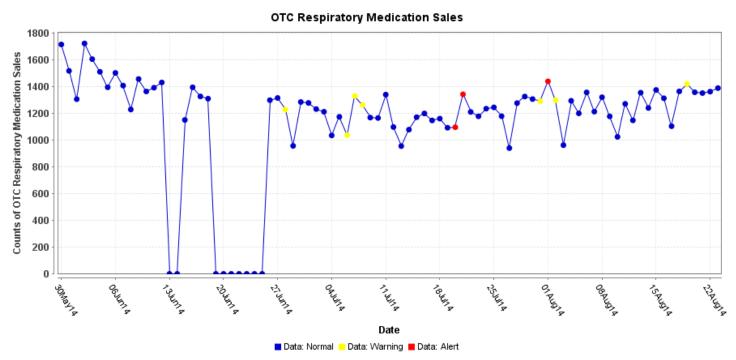
# Weekly Percentage of Visits for ILI



\*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

# **OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:**

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



#### PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

**WHO update:** The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

**Alert phase**: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

#### **NATIONAL DISEASE REPORTS\***

**BOTULISM (ALASKA):** 18 August 2014, State health officials are investigating a cluster of possible botulism cases in the Yukon-Kuskokwim Delta that began with a shared meal of fermented fish heads, an epidemiologist said Mon 18 Aug 2014. Of 4 people who ate together last week, one died, and 2 others fell ill, said Louisa Castrodale, an epidemiologist in the Alaska Division of Public Health. Alaska State Troopers on Sun 17 Aug 2014 evening said the man who died was 59, of Lower Kalskag, a village of about 300 people on the Kuskokwim River 350 miles west of Anchorage. He ate the fish Wed 13 Aug 2014 and complained of seeing double and feeling ill, according to the trooper's report. He was found dead in his home Fri 15 Aug 2014. His body was flown to Anchorage for an autopsy by the state medical examiner. Health officials are testing samples of the food as well as clinical samples from the people who may have been infected to look for signs of the botulinum toxin. Testing takes about a week, Castrodale said. Botulism is a life-threatening disease and a public health emergency. The bacteria can incubate in some traditional Alaska native foods including fermented "stink heads," which some in the Yukon-Kuskokwim region consider a delicacy, but others stay away from. The traditional way of aging the fish in grass or straw has given way to glass or plastic containers that can increase the risk, according to a 2011 state report, "Botulism in Alaska." If officials confirm that the man died from botulism, it will be the 1st Alaska death from the bacteria since 2007, Castrodale said. Health care providers are urged to immediately report suspected cases to ensure quick treatment and to stop others from eating suspect food. People may suffer from nausea, diarrhea, blurred vision, skeletal muscular weakness and partial paralysis. (Botulism is listed in Category A on the CDC List of Critical Biological Agents) \*Suspect cases

**EASTERN EQUINE ENCEPHALITIS (NEW HAMPSHIRE):** 22 August 2014, A Conway [Carroll County, New Hampshire] resident has tested positive for eastern equine encephalitis [virus infection], commonly referred to as EEE, the Department of Health and Human Services [HHS] announced last night [21 Aug 2014]. This is the 1st human case confirmed by the department since 2009. So far this season, 5 batches of mosquitoes have tested positive for the virus, the department said: 2 [pools] from Derry, 2 from Candia and one, 1st announced last week, from Londonderry. Last year [2013], there were 27 confirmed cases [and positive mosquito pools] of EEE in New Hampshire -- 3 animals and 24 mosquito batches, according to the department. HHS was not able to provide additional details about the medical condition of the person who tested positive for EEE. New Hampshire Public Health Director Dr. Jose Montero urged residents to take the threat of mosquito-borne illnesses like EEE and West Nile seriously at all times and not just in light of this recent case. "Mosquito prevention should happen not today or for this weekend," Montero said. "It should happen the whole season." (Viral encephalitis is listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**SALMONELLA (USA):** 21 August 2014, A division of Long Island [New York state] food producer Hain Celestial is voluntarily recalling several lots of its peanut and almond butters because of possible contamination with Salmonella bacteria. The products are sold as Arrowhead Mills peanut butter and MaraNatha almond and peanut butters as well as private label organic almond butters sold at Whole Foods and Trader Joe's. About 45 production lots are affected by the recall. The products are part of Hain Celestial's unit known as nSpired Foods. A spokesman for The Hain Celestial Group of Lake Success would not discuss the products and referred all questions to its affiliates' websites. Hain Celestial serves as headquarters for a vast organic foods empire in several states. The contamination was found at nSpired's plant in Ashland, Oregon, where a routine federal inspection turned up evidence of the bacterium in July 2014, according to the FDA. The agency initiated its latest round of analyses on 15 Jul 2014 and an inspection that is still ongoing, an FDA report shows.

Another division, Texas-based Arrowhead Mills, sells organic nut butters produced by the Oregon plant. In a statement Thursday, 21 Aug 2014, Maureen Putman, Arrowhead Mills' president, said her company is working with the FDA to remedy the problem. "All our retail partners have been notified and are removing and destroying the affected Arrowhead Mills products from store shelves and warehouses," Putman said, adding that anyone who has purchased any of the possibly tainted foods to dispose of them and their containers. The company emphasized that products should not be returned to grocers. Products under a variety of brand names are sold throughout the USA as well as in Hong Kong, the United Arab Emirates and the Dominican Republic. A total of 4 people in Connecticut, Iowa, Tennessee and Texas have become ill as a result of consuming the nut butters, according to Arrowhead Mills. Federal health authorities, however, do not as yet have an updated list of those who've become ill, but at least 1 person required hospitalization, according to the CDC, which Thursday, 21 Aug 2014, identified the contaminating bacterium as Salmonella [enterica serotype] Braenderup. (Food safety threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect cases

## **INTERNATIONAL DISEASE REPORTS\***

**LISTERIA (DENMARK):** 19 Aug 2014, Another person has died after being infected with Listeria bacteria from a Danish sausage company, bringing the death toll of the disease outbreak to 13, the State Serum Institute (SSI) said Tuesday [19 Aug 2014]. A total of 24 people have so far been confirmed with the infection, as 3 new cases were reported on Monday [18 Aug 2014], according to the SSI. A Hedehusene-based sausage company, Joern A. Rullepoelser A/S, has proved to be the main source of infection. The company has been shut down, and all its products were withdrawn from shelves. On Sunday [17 Aug 2014], the Danish Veterinary and Food Administration submitted a report on its handling of the listeriosis outbreak, saying it did not respond quickly enough in tracing the problem. "When it is proved there is a direct connection between the food products and deaths, the authorities

should immediately launch a thorough investigation of the specific company," Minister for food, agriculture and fishery Dan Joergensen said in a press release. "That hasn't happened quickly enough, which is lamentable," said the minister. The head of the emergency management unit of the Danish Veterinary and Food Administration was removed from his post. (Food safety threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect cases

**EBOLA (GUINEA, LIBERIA, NIGERIA, SIERRA LEONE):** 22 Aug 2014, Confirmed, probable, and suspect cases and deaths from Ebola virus disease in Guinea, Liberia, Nigeria, and Sierra Leone, as of 20 Aug 2014: Total cases 2615, deaths 1427. Between 19-20 Aug 2014, a total of 142 new cases of Ebola virus disease (laboratory-confirmed, probable, and suspect cases) as well as 77 deaths were reported from Guinea, Liberia, Nigeria, and Sierra Leone. [A] new draft budget is being reviewed by partners. The increase in needed resources is based on improved data and understanding of the situation on the ground in the affected countries. The new estimation of costs is derived using a unit-cost model, built for the most intense transmission areas and reflects the average operational costs based on the current situation in the affected countries. The major assumptions for the cost estimates will be announced towards the end of next week. WHO continues to receive reports of rumoured or suspected cases from countries around the world and systematic verification of these cases is ongoing. Countries are encouraged to continue engaging in active surveillance and preparedness activities. As of today, no new cases have been confirmed outside of Guinea, Liberia, Nigeria, or Sierra Leone [but see Nigeria's 2 new cases in [2] below]. WHO does not recommend any travel or trade restrictions be applied except in cases where individuals have been confirmed or are suspected of being infected with EVD or where individuals have had contact with cases of EVD. (Viral hemorrhagic fevers are listed in Category A on the CDC List of Critical Biological Agents) \*Non-suspect and suspect cases

**ANTHRAX (KENYA):** 23 Aug 2014 A suspected anthrax tainted dead cow is being blamed for the death of a 5-year-old child at Mategeta village in Narok South Sub-County Saturday [23 Aug 2014], according to the Kenyan news source, Standard Media. It is reported that the child and at least 2 adults became infected after consuming the dead cow meat. The 2 adults are currently admitted at Narok County Hospital. Health officials fear more deaths are likely to occur because many more people took the tainted beef home. The 3 cases above come after locals defied orders from public health officers who had told them not to consume the meat after 3 cows died. Anthrax is a serious infectious disease caused by Gram-positive, rod-shaped bacteria known as Bacillus anthracis. Anthrax can be found naturally in soil and commonly affects domestic and wild animals around the world. Although it is rare, people can get sick with anthrax if they come in contact with infected animals or contaminated animal products. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) \* Non-suspect case and suspect cases

**EBOLA (DEMOCRATIC REPUBLIC OF CONGO):** 24 Aug 2014, The Democratic Republic of Congo has confirmed that an outbreak of haemorrhagic fever in the north of the country has been identified as Ebola. Health Minister Felix Numbi told the BBC that tests on two people had confirmed the disease in Equateur province, where 13 had already died. But he said the deaths occurred in an isolated area and the disease seemed a different strain to West Africa's. Dr Numbi said a quarantine zone was being set up to contain the disease. The cases are the first reported outside West Africa since the outbreak there began. There is no known cure but some affected people have recovered after being given an experimental drug, ZMapp. However, supplies are now exhausted. (Viral hemorrhagic fevers are listed in Category A on the CDC List of Critical Biological Agents) \*Non-suspect and suspect cases

National and International Disease Reports are retrieved from http://www.promedmail.org/.

# OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

**NOTE**: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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# Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin  ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy.  ACUTE descending motor paralysis (including muscles of respiration)  ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF  ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointesti nal)

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)  SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus  ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis  ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain  EXCLUDES chronic conditions such as chronic	Anthrax (inhalational) Tularemia Plague (pneumonic)
	bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE acute exacerbation of chronic illnesses.)	
Neurological	ACUTE neurological infection of the central nervous system (CNS)  SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis  ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS  ACUTE non-specific symptoms of CNS infection such as meningismus, delerium  EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)  SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox  ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

# Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present	Not applicable
	EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable